

Hyperinflation in Yugoslavia: An Example in Monetary History

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#### Abstract

Hyperinflation most often occurs at a time when the amount of money in circulation is increasing without the Gross Domestic Product (GDP) showing growth. Excessive printing of money from the monetary authority (central bank) in a country is a fundamental reason for hyperinflation. The case of hyperinflation in the Federal Republic of Yugoslavia (FRY) in the early 1990s represents one of the largest hyperinflations in history. It was a time of wars in the former Socialist Federative Republic of Yugoslavia (SFRY) and it is followed by sanctions imposed on FRY by the international community, for participation in war activities in the territories of other former SFRY Republics. Starting from 1992, the Yugoslav dinar experienced a hyperinflation episode which lasted for a total of 25 months. Prices are rising very fast, so that in late 1992 and in 1993, hyperinflation erupted, taking on almost unimaginable proportions. In the whole of 1993 prices went up by 116.5 thousand billion percent, and in the first three weeks of 1994 by 313 million percent.

Keywords: Yugoslavia, dinar, hyperinflation, denomination.

#### 1. Introduction

Inflation is one of the most important economic concepts and represents a general increase in the prices of products and services within an economic area (the phenomenon of rising prices). Inflation is actually the rate at which the prices of products and services have increased over a period of time (Devetaković, Jovanović Gavrilović & Rikalović, 2012). This phenomenon reduces the purchasing power of the population in the country.

There are different causes for inflation. One of the most important is the excessive increase in the money supply in circulation. When a larger amount of money follows a smaller quantity of products and services, an imbalance in the commodity-money relationship results, which leads to a logical rise in prices and a decrease in the value of money.

Hyperinflation is extremely high or *rapid inflation* (rising prices), which causes a considerable fall in the value of the national currency. Hyperinflation is actually inflation that is very difficult to control. In extreme form, it can cause the entire monetary system in the country to collapse. Although the threshold for hyperinflation is not clearly defined, some economists

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argue that inflation becomes hyperinflation when price growth exceeds 50% per month (Devetaković, Jovanović Gavrilović & Rikalović, 2012).

Hyperinflation most often occurs at a time when the amount of money in circulation is increasing without the gross domestic product showing growth (Fergusson, 2010). Excessive printing of money from the monetary authority in the country (Central Bank) is a fundamental reason for hyperinflation. This imbalance of supply and demand in the money market (too much money and too little commodity) affects the prices of products and services that start to rise and the local currency starts to lose its value.

# 2. Hyperinflation throughout history

If we look at the political or economic history of the world, we can find that hyperinflation has always been preceded by political instability, the powerlessness of governing structures and, as we have stated before – the loss of citizens' trust in the country and, consequently, in its money.

The first recorded case of hyperinflation occurred in Rome in the third century AD. Five of the biggest hyperinflations in history are the following (Five biggest ..., 2018):

- (1) Hungary, 1946.
- Daily inflation rate: 207%,
- Double the prices every 15 hours.
- (2) Zimbabwe, 2008.
- Daily inflation rate: 98%,
- Duplication of prices every 25 hours,
- (3) Federal Republic of Yugoslavia, 1994.
- Daily inflation rate: 65%,
- Double the prices every 34 hours.
- (4) Germany, 1923.
- Daily inflation rate: 21%,
- Duplication of prices every three days and 17 hours.
- (5) Greece, 1944.
- Daily inflation rate: 18%,
- Duplication of prices every four days and 6 hours.

# 3. Characteristics of hyperinflation in Yugoslavia

The Federal Republic of Yugoslavia was created by the dissolution of the SFRY in the early 1990s. It existed until February 2003, when a state union with the name Serbia and Montenegro was created. On April 27, 1992, in Belgrade, the "remnants" of the SFRY Assembly, which included MPs from Serbia and Montenegro, proclaimed the Constitution of the Federal Republic of Yugoslavia.

Sanctions on the FR Yugoslavia were imposed on 30 May 1992, by the United Nations Security Council on charges of involvement in the war in Bosnia and Herzegovina. The UN Security

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Council resolution 757 imposing sanctions on the FRY provided for a complete international economic embargo on this country.

Under the influence of international sanctions, there was a major economic crisis in the country and the emergence of hyperinflation, which also saw the issuance of a banknote with a record denomination of RSD 500,000,000.



Image 1. Banknote of 500,000,000,000 dinars at the time of hyperinflation

Starting from 1992, the Yugoslav dinar experienced a hyperinflation episode which lasted for a total of 25 months. Prices are rising very fast, so that in late 1992 and in 1993 hyperinflation erupted, taking on almost unimaginable proportions. In the whole of 1993 prices went up by 116.5 thousand billion percent, and in the first three weeks of 1994 by 313 million percent.

In the context of international comparisons pertaining to the twentieth century, in the intensity of hyperinflation recorded in late 1993 and early 1994, the FR Yugoslavia is at the top (Milošević, 2017). Hyperinflation, measured in millions of percent that would not have developed without an accommodating monetary policy, had devastating effects on many spheres of society and the economy, including the banking sector. In the conditions of hyperinflation, the banks have redistributed huge income for the benefit of the loan beneficiaries who claim debt, which is only one of the possible forms of initial capital accumulation in our country.

The monetary policy decision for the fourth quarter (Q4) of 1993 established that the budget deficit (federal and republican) would be allocated by 116,158.8 billion of the primary issue. However, it was clear at the outset that the Federal Government was counting on an unrealistically low rate of inflation in Q4, and that due to the unrealistically deficit and galloping inflation that was detrimental to the already low original budget revenues, the said amount would be used before the end of Q4.

In a context where the Federal Government and the republican governments have virtually no concept of economic policy, or taken at least partial measures to halt inflation (except for the September price freeze), the originally planned amount to cover budget deficits was used in full till 20 November 1993.

The established dynamics of using long-term loans with the National Bank of Yugoslavia (NBY) has never been honored in practice, and the increasing use of primary emission to cover budget deficits has led to over 90% of the Federal Budget expenditures being financed by primary emission in November 1993. Due to the described pressure to monetize the budget deficit in November, 88% of primary issue loans were directed to budgets, and only 12% to banks.

The entry of the country into the final phase of hyperinflation in late 1993, in which the loss of national currency occurs, can best be seen by the degree of impairment of banknotes issued by the NBY in the fourth quarter of 1993. They lost their circulation, from 1 October until the day of new denomination appeared for fourteen days, 66% of the value measured according to the German mark (DEM) rate. Since mid-October, eight more denominations have been put into circulation, a manifestation of devastating hyperinflation that in a short time reduces the purchasing power of a new denomination to zero. For example, on 15 December 1993, a denomination of 50,000,000,000,000 dinars was put into circulation. At the time of release it was worth of DEM 12.50. Only seven days after that, the denomination of ten times of the nominal value was put into circulation, and the previously issued denomination was worth only DEM 0.38 in that day, which means that in seven days it lost 97% of its value (Milošević, 2017).

The perniciousness of the aforementioned policy is reflected in the fact that, first, there was no increase in production, secondly, banks, thanks to approved credit lines, have recorded almost complete melting of the economy due to approved credit lines, were not able to provide credit support even to companies offering propulsive loans after the relaxation and lifting of sanctions against FR Yugoslavia. In addition, the obligations of individual banks to foreign creditors will be activated after the lifting of sanctions, which will put them in an even more difficult situation.

Many banks were forced to setting up their own trading companies to protect their capital. The rapid expansion of parabanking occurred, in the form of buying, stocking and selling goods, especially scarce consumer goods and supplies in order to maximize price differentials, as well as buying real estate in attractive locations, and it is a by-product of the administrative restriction of interest rates and thus the practical suspension of the bank loan market (Đukić, 1994). This should be treated as a rational behavior of the banks in the given business conditions, especially with the NBY interest rate policy.

As we have already mentioned, the Federal Republic of Yugoslavia in 1992-1994 saw hyperinflation which ranks third in world economic history, both in terms of duration of 22 months (March 1992 – January 1994), and at maximum a monthly level of 314 million or more precisely 313,563,558% (January 1994). Daily inflation was 62%, and inflation in just one hour (60 minutes) of 2.03% was higher than the annual inflation of many developed countries. January 1994 inflation calculated on an annual basis was a fantastic 116,545,906,563,330% or 116,546 billion percent. At a time of such high inflation in the FR Yugoslavia, prices in stores were expressed in a conditional unit – point, which was equal to the German mark. The turnover was made either in German marks or in dinars at the current "black" rate, which changed often several times during the day. At the end of 1993, a 500,000,000 banknote was also printed (500 billion dinars, see Picture 1), for which it ultimately could not be bought not a single German mark on the street market in money changers. Just after the denomination of the dinar from 1 January 1994 (when one billion dinars was denominated in one dinar), on 13 January in the morning street money changers sold the German mark for 500,000, around noon for 600,000, and in the evening for 800,000 dinars. The midday black market German mark was 900,000 on 14 January, 2,500,000 on 15 January, on 16 January, 3.500.000, on 17 January 5,000,000, on 18 January 5,500.00, on 20 January 14 million, and on 21 January 15 million dinars.

The money was so quickly devalued that it came to absurd situations. At the beginning of 1994 (after a denomination in the ratio of one billion "old" dinars to one "new" dinar), a 1 dinar metal coin appeared, but soon 700 tons of these coins were to be set aside for one dollar. Pension payments were made on 17 January, and for the average pension amount of RSD 4.8 million on the "black" market could not buy any German mark. At the same time, a kilogram of beef was RSD 70 million, and a laundry bag of 3 kg costs RSD 67 million. Disruptive hyperinflation has squeezed national monetary unit – dinar from economy. In January 1994, the money supply was only 0.4% of GDP, while this percentage in normal circumstances ranges between 25 and 30%. The dinar has

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ceased to fulfill such functions of money as measures value, means of payment, value stock and, well partly, the functions of money as a means of transport, or a means of exchange. Everyone was trying to get rid of the dinar so that is the speed of money turnover, at the time of hyperinflation, reached a staggering 3,673, that is, the dinar has "gone hand in hand" 10 times in just one day. It was hard to believe that such a chaotic state would be interrupted in just a few days thanks to the program of Dr. Dragoslav Avramović, when it was executed, among other things and monetary reform (reconstruction), when a new dinar is introduced (Petrović, Bogetić & Vujošević, 1999).

As a part of the monetary reconstruction program, among others, the denomination of the dinar was also made. By denomination we mean the consolidation of the domestic national currency through replacements of old to new banknotes in a particular relationship, after of which one new currency is equivalent in value of a large number of national currency units valid until then. All prices of goods and services, foreign exchange rates, bank accounts, etc. are calculated in the same way. This is most often done by "deleting" a certain number of "zeros". For example, after the first denomination made in SFRY (1 August 1965), 100 "old" equals one "new" dinar. In addition to the denomination, a number of other measures are being undertaken, as the measures of economic policy for monetary reform to be successful. In countries with high hyperinflation, monetary reform often leads to increased confidence in the new national currency. This was the case in the FR Yugoslavia when on 24 January 1994 was the sixth denomination of dinars in order after World War II. After incredible hyperinflation, prices and the exchange rate were stabilized for one day, and after that for several months to come.

### 4. Conclusion

Hyperinflation in the FR Yugoslavia in the early 1990s is a direct picture of the catastrophic economic situation the country fell into, in the context of the wars that took place in the territories of Croatia and Bosnia and Herzegovina. In the context of international comparisons pertaining to the twentieth century, in the intensity of hyperinflation recorded in late 1993 and early 1994, FR Yugoslavia is at the top. Hyperinflation, measured in millions of percent that would not have developed without an accommodating monetary policy, had devastating effects on many spheres of the society and economy, including the banking sector. In the conditions of hyperinflation, the banks have redistributed huge income for the benefit of the loan beneficiaries who claim debt, which is only one of the possible forms of initial capital accumulation in our country.

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